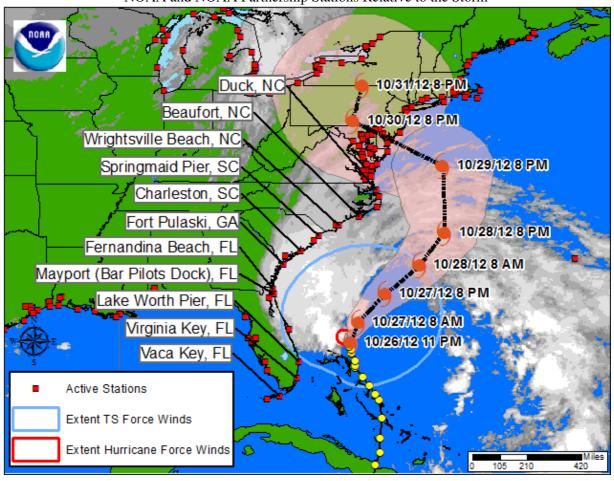


NOAA and NOAA Partnership Stations Relative to the Storm



## Storm Analysis

As of 10/27/2012 00:00 EDT, water levels from Mayport, FL to Charleston, SC continue to rise and range between 1.7 to 2.7 feet above tidal predictions. Water levels from northern South Carolina to North Carolina are rising and range between 0.9 to 1.1 feet above tidal predictions. Water levels on the southeastern coast of Florida remain elevated and range between 1.0 to 1.5 feet above tidal predictions. Winds from southern Florida to North Carolina range from 10 to 20 knots with slightly higher gusts. Barometric pressure continues to fall northward from Mayport, FL to Duck, NC.

Water Level and Meteorological plots available below are updated automatically. Water level predictions relative to <u>Mean Lower Low Water</u> are:

Mayport (Bar Pilots Dock), FL: Next predicted high tides are 5.6 ft (1.72 m) at 10/27/2012 07:40 EDT and 5.2 ft (1.60 m) at 10/27/2012 19:58 EDT.

Fernandina Beach, FL: Next predicted high tides are 7.1 ft (2.16 m) at 10/27/2012 07:43 EDT and 6.6 ft (2.04 m) at 10/27/2012 20:05 EDT.

Fort Pulaski, GA: Next predicted high tides are 7.9 ft (2.41 m) at 10/27/2012 06:51 EDT and 7.4 ft (2.29 m) at 10/27/2012 19:18 EDT.

Charleston, SC: Next predicted high tides are 6.1 ft (1.87 m) at  $10/27/2012\ 06:47\ EDT$  and  $5.7\ \text{ft} (1.77\ \text{m})$  at  $10/27/2012\ 19:10\ EDT$ .

Springmaid Pier, SC: Next predicted high tides are 5.8 ft (1.77 m) at 10/27/2012 06:21 EDT and 5.5 ft (1.69 m) at 10/27/2012 18:41 EDT.

Wrightsville Beach, NC: Next predicted high tides are 4.7 ft (1.43 m) at 10/27/2012 06:12 EDT and 4.2 ft (1.30 m) at 10/27/2012 18:30 EDT.

Beaufort, NC: Next predicted high tides are 3.7 ft (1.14 m) at 10/27/2012 06:47 EDT and 3.4 ft (1.04 m) at 10/27/2012 19:00 EDT.

Duck, NC: Next predicted high tides are 3.9 ft (1.19 m) at 10/27/2012 06:27 EDT and 3.4 ft (1.04 m) at 10/27/2012 18:41 EDT.

Lake Worth Pier, FL: Next predicted high tides are 3.5 ft (1.07 m) at 10/27/2012 07:05 EDT and 3.2 ft (0.99 m) at 10/27/2012 19:14 EDT.

Virginia Key, FL: Next predicted high tides are 2.7 ft (0.82 m) at 10/27/2012 07:57 EDT and 2.6 ft (0.80 m) at 10/27/2012 20:07 EDT.

Vaca Key, FL: Next predicted high tides are 1.1 ft (0.32 m) at 10/27/2012 01:13 EDT and 1.0 ft (0.32 m) at 10/27/2012 14:18 EDT.

For additional data, please see the <u>Center for Operational Oceanographic Products & Services</u> website. For information on Highest Astronomical Tide (HAT), NAVD88 and other datums, please see <u>Tidal Datums</u>. For more information or archived products and reports, please see the <u>Storm QuickLook Homepage</u>.

| Analyst:CMF |  |
|-------------|--|
|             |  |
|             |  |

### SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

HURRICANE SANDY ADVISORY NUMBER 19 1100 PM EDT FRI OCT 26 2012

...SANDY REMAINS A HURRICANE AS IT MOVES SLOWLY NORTHWARD AWAY FROM THE BAHAMAS...

WATCHES AND WARNINGS
----CHANGES WITH THIS ADVISORY...

NONE.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT...

A TROPICAL STORM WARNING IS IN EFFECT FOR...

- \* FLORIDA EAST COAST FROM NORTH OF JUPITER INLET TO ST AUGUSTINE
- \* SOUTH SANTEE RIVER TO DUCK...INCLUDING PAMLICO AND ALBEMARLE SOUNDS

A TROPICAL STORM WATCH IS IN EFFECT FOR...

- \* SAVANNAH RIVER TO SOUTH SANTEE RIVER
- \* FLORIDA EAST COAST FROM NORTH OF ST AUGUSTINE TO FERNANDINA BEACH

IN ADDITION...GALE WATCHES ARE IN EFFECT FOR AREAS NORTH OF THE TROPICAL STORM WARNING AREA. SEE STATEMENTS FROM LOCAL NATIONAL WEATHER SERVICE FORECAST OFFICES.

INTERESTS ELSEWHERE ALONG THE EAST COAST OF THE UNITED STATES SHOULD MONITOR THE PROGRESS OF SANDY.

A TROPICAL STORM WARNING MEANS THAT TROPICAL STORM CONDITIONS ARE EXPECTED SOMEWHERE WITHIN THE WARNING AREA.

A TROPICAL STORM WATCH MEANS THAT TROPICAL STORM CONDITIONS ARE POSSIBLE WITHIN THE WATCH AREA.

FOR STORM INFORMATION SPECIFIC TO YOUR AREA IN THE UNITED STATES...INCLUDING POSSIBLE INLAND WATCHES AND WARNINGS...PLEASE MONITOR PRODUCTS ISSUED BY YOUR LOCAL NATIONAL WEATHER SERVICE FORECAST OFFICE.

### **DISCUSSION AND 48-HOUR OUTLOOK**

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AT 1100 PM EDT THE CENTER OF HURRICANE SANDY WAS LOCATED ABOUT 90 MI N OF GREAT ABACO ISLAND OR ABOUT 395 MI SSE OF CHARLESTON SOUTH CAROLINA. SANDY IS MOVING TOWARD THE NORTH NEAR 7 MPH AND A GENERAL NORTHWARD MOTION IS EXPECTED TO CONTINUE TONIGHT...FOLLOWED BY A TURN TOWARD THE NORTH-NORTHEAST WITH AN INCREASE IN FORWARD SPEED ON SATURDAY...AND A TURN TOWARD THE NORTHEAST ON SUNDAY. ON THE FORECAST TRACK...THE CENTER OF SANDY WILL BE MOVING AWAY FROM THE NORTHWESTERN BAHAMAS OVERNIGHT.

REPORTS FROM A NOAA HURRICANE HUNTER AIRCRAFT INDICATE THAT MAXIMUM SUSTAINED WINDS REMAIN NEAR 75 MPH WITH HIGHER GUSTS. SANDY IS A CATEGORY ONE HURRICANE ON THE SAFFIR-SIMPSON HURRICANE WIND SCALE. SLOW WEAKENING IS FORECAST DURING THE NEXT DAY OR TWO...AND SANDY MAY WEAKEN TO A TROPICAL STORM ON SATURDAY.

HURRICANE FORCE WINDS EXTEND OUTWARD UP TO 70 MILES FROM THE CENTER...AND TROPICAL STORM FORCE WINDS EXTEND OUTWARD UP TO 415 MILES. NOAA BUOY 41010 RECENTLY REPORTED SUSTAINED WINDS OF 49 MPH AND A WIND GUST OF 60 MPH.

THE MINIMUM CENTRAL PRESSURE ESTIMATED FROM THE HURRICANE HUNTER AIRCRAFT DATA IS 969 MB.

### HAZARDS AFFECTING LAND

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WIND...TROPICAL STORM CONDITIONS ARE EXPECTED TO CONTINUE OVER THE WARNING AREA ALONG THE EAST COAST OF FLORIDA TONIGHT. TROPICAL STORM CONDITIONS ARE EXPECTED IN THE TROPICAL STORM WARNING AREA IN THE CAROLINAS SATURDAY AND SATURDAY NIGHT. TROPICAL STORM CONDITIONS ARE POSSIBLE IN THE WATCH AREAS TONIGHT THROUGH SATURDAY NIGHT.

RAINFALL...ADDITIONAL RAINFALL ACCUMULATIONS OF 1 TO 2 INCHES ARE EXPECTED OVER PORTIONS OF EASTERN FLORIDA...WITH ISOLATED MAXIMUM AMOUNTS OF 6 INCHES POSSIBLE. RAINFALL TOTALS OF 3 TO 6 INCHES ARE POSSIBLE OVER FAR EASTERN NORTH CAROLINA.

STORM SURGE...THE COMBINATION OF A DANGEROUS STORM SURGE AND THE TIDE WILL CAUSE NORMALLY DRY AREAS NEAR THE COAST TO BE FLOODED BY RISING WATERS. THE WATER COULD REACH THE FOLLOWING DEPTHS ABOVE GROUND IF THE PEAK SURGE OCCURS AT THE TIME OF HIGH TIDE...

FLORIDA COAST WITHIN WARNING AREA...1 TO 3 FT NORTH CAROLINA WITHIN THE WARNING AREA...3 TO 5 FT REMAINDER OF NORTH CAROLINA AND SE VIRGINIA INCLUDING LOWER CHESAPEAKE BAY...2 TO 4 FT

SURGE-RELATED FLOODING DEPENDS ON THE RELATIVE TIMING OF THE SURGE AND THE TIDAL CYCLE...AND CAN VARY GREATLY OVER SHORT DISTANCES. GIVEN THE LARGE WIND FIELD ASSOCIATED WITH SANDY...ELEVATED WATER LEVELS COULD SPAN MULTIPLE TIDE CYCLES RESULTING IN REPEATED PERIODS OF COASTAL AND BAYSIDE FLOODING. FOR INFORMATION SPECIFIC TO YOUR AREA...PLEASE SEE PRODUCTS ISSUED BY YOUR LOCAL WEATHER OFFICE.

SURF...DANGEROUS SURF CONDITIONS ARE OCCURRING FROM FLORIDA THROUGH THE CAROLINAS AND WILL CONTINUE FOR THE NEXT COUPLE OF DAYS. THESE CONDITIONS ARE EXPECTED TO SPREAD INTO THE MID-ATLANTIC AND NORTHEASTERN STATES OVER THE WEEKEND.

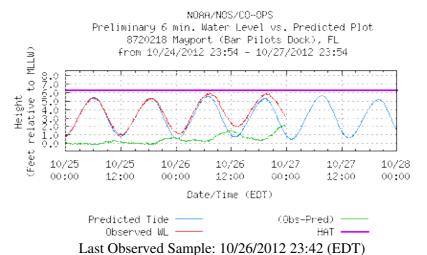
FORECASTER BEVEN

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: Mayport (Bar Pilots Dock) - Water Level, Mayport (Bar Pilots Dock) - Winds, Mayport (Bar Pilots Dock) - Barometric, Fernandina Beach - Water Level, Fernandina Beach - Winds, Fernandina Beach - Barometric, Fort Pulaski - Water Level, Fort Pulaski - Winds, Fort Pulaski - Barometric, Charleston - Water Level, Charleston - Water Level, Springmaid Pier - Winds, Springmaid Pier - Barometric, Wrightsville Beach - Water Level, Wrightsville Beach - Winds, Wrightsville Beach - Barometric, Beaufort - Water Level, Beaufort - Winds, Beaufort - Barometric, Duck - Water Level, Duck - Water Level, Lake Worth Pier - Water Level, Lake Worth Pier - Winds, Lake Worth

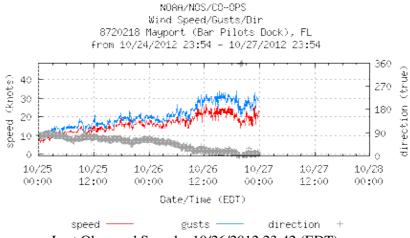
<u>Pier - Barometric, Virginia Key - Water Level, Virginia Key - Winds, Virginia Key - Barometric, Vaca Key - Water Level, Vaca Key - Winds, Vaca Key - Barometric,</u>

## Mayport (Bar Pilots Dock), FL - Return to List



Relative to MLLW: Observed: 3.13 ft. Predicted: 1.08 ft. Residual: 2.05 ft. Historical Maximum Water Level: Sep 27 2004, 2.47 ft. above MHHW

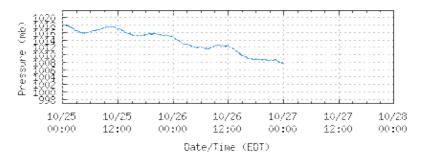
# Mayport (Bar Pilots Dock), FL - Return to List



Last Observed Sample: 10/26/2012 23:42 (EDT) Wind Speed: 23 knots Gusts: 29 knots Direction: 7° T

### Mayport (Bar Pilots Dock), FL - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 8720218 Mayport (Bar Pilots Dock), FL from 10/24/2012 23:54 - 10/27/2012 23:54



barometric pressure ——

Last Observed Sample: 10/26/2012 23:42 (EDT)
Barometric Pressure: 1007.6 mb

# Fernandina Beach, FL - Return to List

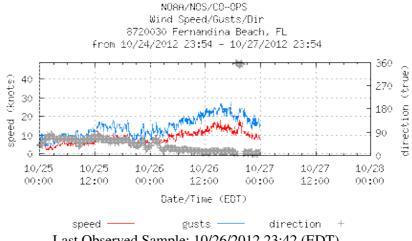
NOAA/NOS/CO-OPS Preliminary 6 min. Water Level vs. Predicted Plot 8720030 Fernandina Beach, FL Height (Feet relative to MLLW) from 10/24/2012 23:54 - 10/27/2012 23:54 876543210 10/25 10/26 10/26 10/27 10/27 10/28 10/25 00:00 12:00 00:00 12:00 00:00 12:00 00:00 Date/Time (EDT)

Predicted Tide (Obs-Pred) (Obs-Pred) HAT

Last Observed Sample: 10/26/2012 23:42 (EDT)

Relative to MLLW: Observed: 4.23 ft. Predicted: 1.46 ft. Residual: 2.77 ft. Historical Maximum Water Level: Oct 2 1898, 6.94 ft. above MHHW

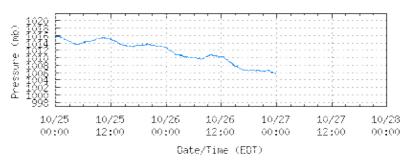
## Fernandina Beach, FL - Return to List



Last Observed Sample: 10/26/2012 23:42 (EDT) Wind Speed: 8 knots Gusts: 14 knots Direction: 11° T

## Fernandina Beach, FL - Return to List

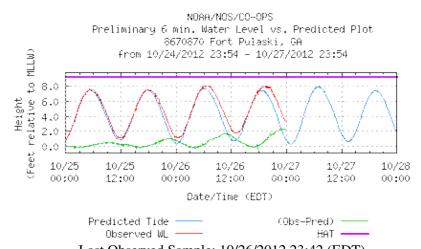
NOAA/NOS/CO-OPS Barometric Pressure Plot 8720030 Fernandina Beach, FL from 10/24/2012 23:54 - 10/27/2012 23:54



barometric pressure ——
Last Observed Sample: 10/26/2012 23:42 (EDT)

Barometric Pressure: 1005.7 mb

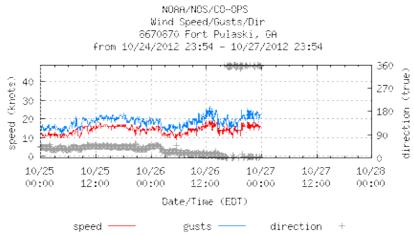
### Fort Pulaski, GA - Return to List



Last Observed Sample: 10/26/2012 23:42 (EDT)

Relative to MLLW: Observed: 3.27 ft. Predicted: 1.02 ft. Residual: 2.25 ft. Historical Maximum Water Level: Oct 15 1947, 3.4 ft. above MHHW

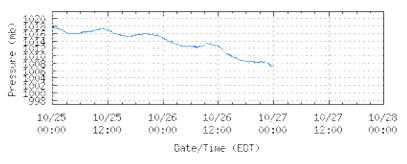
## Fort Pulaski, GA - Return to List



Last Observed Sample: 10/26/2012 23:42 (EDT) Wind Speed: 16 knots Gusts: 22 knots Direction: 355° T

### Fort Pulaski, GA - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 8670870 Fort Pulaski, GA from 10/24/2012 23:54 - 10/27/2012 23:54



barometric pressure ——

Last Observed Sample: 10/26/2012 23:42 (EDT)

Barometric Pressure: 1007.2 mb

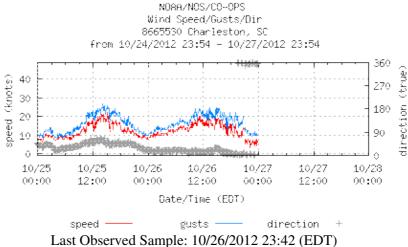
# Charleston, SC - Return to List

NOAA/NOS/CO-OPS Preliminary 6 min. Water Level vs. Predicted Plot 8665530 Charleston, SC Height (Feet relative to MLLW) from 10/24/2012 23:54 - 10/27/2012 23:54 07/6/54/3010 10/25 10/26 10/26 10/27 10/27 10/28 10/25 00:00 12:00 00:00 12:00 00:00 12:00 00:00 Date/Time (EDT) Predicted Tide (Obs-Pred)

Observed WL — HAT — HAT — Last Observed Sample: 10/26/2012 23:42 (EDT)

Relative to MLLW: Observed: 2.26 ft. Predicted: 0.54 ft. Residual: 1.72 ft. Historical Maximum Water Level: Sep 21 1989, 6.76 ft. above MHHW

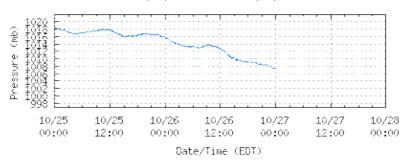
# Charleston, SC - Return to List



Wind Speed: 6 knots Gusts: 10 knots Direction: 355° T

## Charleston, SC - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 8665530 Charleston, SC from 10/24/2012 23:54 - 10/27/2012 23:54

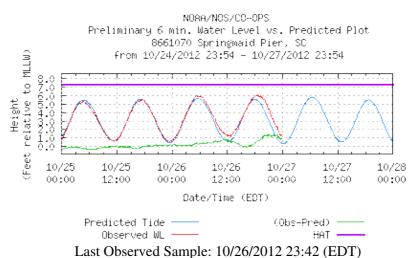


barometric pressure —

Last Observed Sample: 10/26/2012 23:42 (EDT)
Barometric Pressure: 1007.4 mb

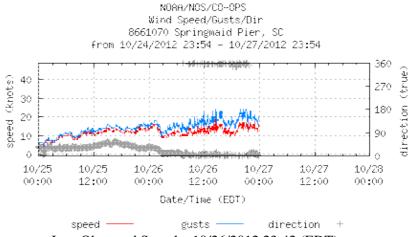
11

# Springmaid Pier, SC - Return to List



Relative to MLLW: Observed: 1.36 ft. Predicted: 0.41 ft. Residual: 0.95 ft. Historical Maximum Water Level: Jan 1 1987, 3.65 ft. above MHHW

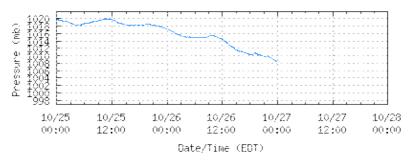
# Springmaid Pier, SC - Return to List



Last Observed Sample: 10/26/2012 23:42 (EDT) Wind Speed: 16 knots Gusts: 20 knots Direction: 1° T

# Springmaid Pier, SC - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 8661070 Springmaid Pier, SC from 10/24/2012 23:54 – 10/27/2012 23:54



barometric pressure ——

Last Observed Sample: 10/26/2012 23:42 (EDT)

Barometric Pressure: 1008.6 mb

# Wrightsville Beach, NC - Return to List

NOAA/NOS/CO-OPS Preliminary 6 min. Water Level vs. Predicted Plot 8658163 Wrightsville Beach, NC Height (Feet relative to MLLW) from 10/24/2012 23:54 - 10/27/2012 23:54 07/6/54/3010 10/25 10/26 10/26 10/27 10/27 10/28 10/25 00:00 12:00 00:00 12:00 00:00 12:00 00:00 Date/Time (EDT)

Predicted Tide (Obs-Pred) HAT Last Observed Sample: 10/26/2012 23:42 (EDT)

Relative to MLLW: Observed: 1.31 ft. Predicted: 0.26 ft. Residual: 1.05 ft. Historical Maximum Water Level: Sep 25 2008, 2.81 ft. above MHHW

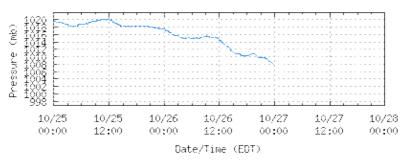
# Wrightsville Beach, NC - Return to List

NOAA/NOS/CO-OPS Wind Speed/Gusts/Dir 8658163 Wrightsville Beach, NC from 10/24/2012 23:54 - 10/27/2012 23:54 360 direction (true) speed (knots) 40 270 30 180 20 90 10 Û 0 10/25 10/26 10/25 10/27 10/27 10/28 10/26 00:00 12:00 00:00 12:00 00:00 12:00 00:00 Date/Time (EDT) gusts direction speed

Last Observed Sample: 10/26/2012 23:42 (EDT) Wind Speed: 18 knots Gusts: 25 knots Direction: 10° T

## Wrightsville Beach, NC - Return to List

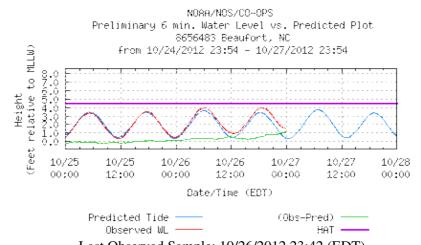
NOAA/NOS/C9-9PS Barometric Pressure Plot 8658163 Wrightsville Beach, NC from 10/24/2012 23:54 - 10/27/2012 23:54



barometric pressure —— Last Observed Sample: 10/26/2012 23:42 (EDT)

Barometric Pressure: 1008.1 mb

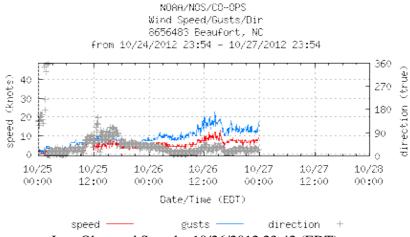
# Beaufort, NC - Return to List



Last Observed Sample: 10/26/2012 23:42 (EDT)

Relative to MLLW: Observed: 1.50 ft. Predicted: 0.41 ft. Residual: 1.09 ft. Historical Maximum Water Level: Sep 14 2005, 3 ft. above MHHW

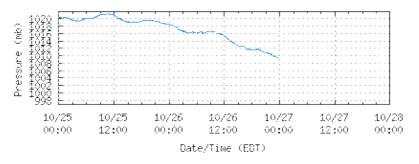
# Beaufort, NC - Return to List



Last Observed Sample: 10/26/2012 23:42 (EDT) Wind Speed: 9 knots Gusts: 17 knots Direction: 25° T

# Beaufort, NC - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 8656483 Beaufort, NC from 10/24/2012 23:54 - 10/27/2012 23:54



barometric pressure ——
Last Observed Sample: 10/26/2012 23:42 (EDT)

Barometric Pressure: 1009.2 mb

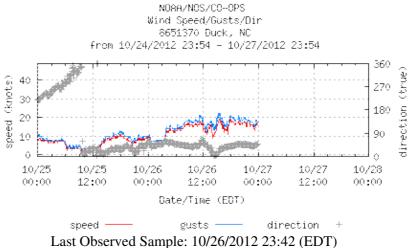
## Duck, NC - Return to List

NOAA/NOS/CO-OPS Preliminary 6 min. Water Level vs. Predicted Plot 8651370 Duck, NC Height (Feet relative to MLLW) from 10/24/2012 23:54 - 10/27/2012 23:54 07/6/04/3010 10/25 10/25 10/26 10/26 10/27 10/27 10/28 00:00 12:00 00:00 12:00 00:00 12:00 00:00 Date/Time (EDT) Predicted Tide (Obs-Pred)

Observed WL — HAT — HAT — Last Observed Sample: 10/26/2012 23:42 (EDT)

Relative to MLLW: Observed: 1.14 ft. Predicted: 0.28 ft. Residual: 0.86 ft. Historical Maximum Water Level: Sep 18 2003, 4.13 ft. above MHHW

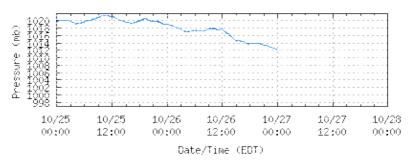
# Duck, NC - Return to List



Wind Speed: 16 knots Gusts: 17 knots Direction: 48° T

## Duck, NC - Return to List

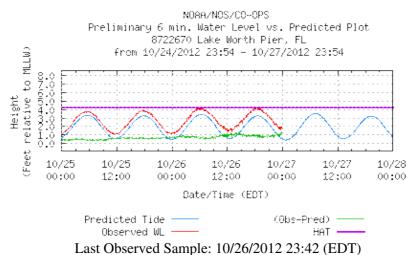
NOAA/NOS/CO-OPS Barometric Pressure Plot 8651370 Duck, NC from 10/24/2012 23:54 - 10/27/2012 23:54



barometric pressure ——
Last Observed Sample: 10/26/2012 23:42 (EDT)

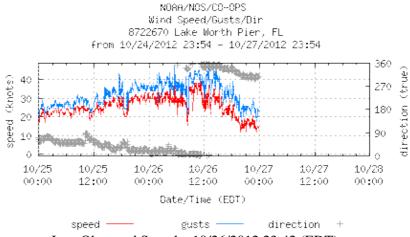
Barometric Pressure: 1012.3 mb

### Lake Worth Pier, FL - Return to List



Relative to MLLW: Observed: 1.91 ft. Predicted: 0.57 ft. Residual: 1.34 ft. Historical Maximum Water Level: Nov 23 1984, 1.88 ft. above MHHW

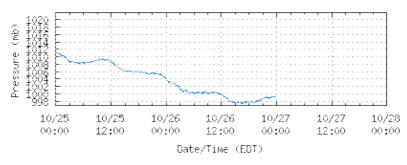
## Lake Worth Pier, FL - Return to List



Last Observed Sample: 10/26/2012 23:42 (EDT) Wind Speed: 14 knots Gusts: 23 knots Direction: 307° T

### Lake Worth Pier, FL - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 8722670 Lake Worth Pier, FL from 10/24/2012 23:54 - 10/27/2012 23:54



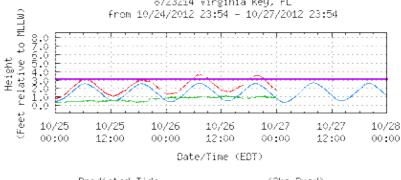
barometric pressure ---

Last Observed Sample: 10/26/2012 23:42 (EDT)

Barometric Pressure: 999.2 mb

### Virginia Key, FL - Return to List

NOAA/NOS/CO-OPS Preliminary 6 min. Water Level vs. Predicted Plot 8723214 Virginia Key, FL from 10/24/2012 23:54 – 10/27/2012 23:54



Predicted Tide (Obs-Pred) (Obs-Pred) HAT

Last Observed Sample: 10/26/2012 23:48 (EDT)
Relative to MLLW: Observed: 1.87 ft. Predicted: 0.89 ft. Residual: 0.98 ft. Historical Maximum Water Level: Oct 24 2005, 2.58 ft. above MHHW

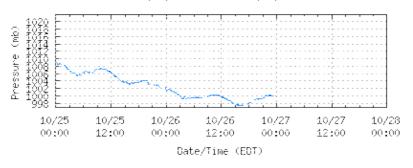
# Virginia Key, FL - Return to List

NOAA/NOS/CO-OPS Wind Speed/Gusts/Dir 8723214 Virginia Key, FL from 10/24/2012 23:54 - 10/27/2012 23:54 360 speed (knots) 40 270 30 direction 180 20 90 0 10/26 10/25 10/25 10/27 10/27 10/28 1.0/26 00:00 12:00 00:00 12:00 00:00 12:00 00:00 Date/Time (EDT) gusts direction speed Last Observed Sample: 10/26/2012 23:48 (EDT)

Wind Speed: 14 knots Gusts: 22 knots Direction: 302° T

## Virginia Key, FL - Return to List

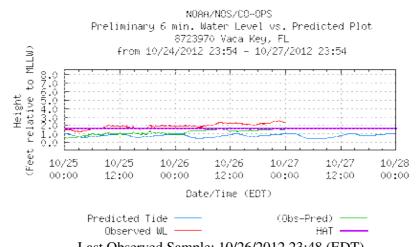
NOAA/NOS/CO-OPS Barometric Pressure Plot 8723214 Virginia Key, FL from 10/24/2012 23:54 - 10/27/2012 23:54



barometric pressure ——
Last Observed Sample: 10/26/2012 23:48 (EDT)

Barometric Pressure: 1000.0 mb

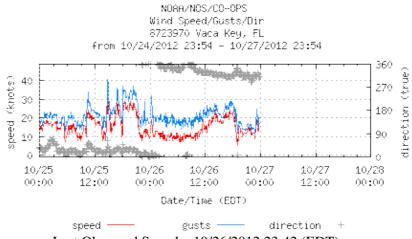
# Vaca Key, FL - Return to List



Last Observed Sample: 10/26/2012 23:48 (EDT)

Relative to MLLW: Observed: 2.41 ft. Predicted: 0.99 ft. Residual: 1.42 ft. Historical Maximum Water Level: Oct 24 2005, 5.8 ft. above MHHW

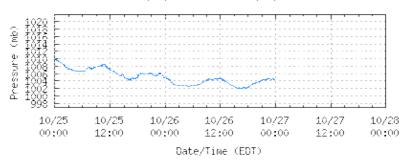
## Vaca Key, FL - Return to List



Last Observed Sample: 10/26/2012 23:42 (EDT) Wind Speed: 17 knots Gusts: 20 knots Direction: 311° T

# Vaca Key, FL - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 6723970 Vaca Key, FL from 10/24/2012 23:54 - 10/27/2012 23:54



barometric pressure ——
Last Observed Sample: 10/26/2012 23:42 (EDT)

Barometric Pressure: 1004.3 mb

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS) National Oceanic and Atmospheric Administration | U.S. Department of Commerce